## ADDENDUM TO PRELIMINARY AMENDMENT DATED APRIL 8, 2002

## MARKED-UP VERSION OF AMENDED PARAGRAPHS

Amendment to paragraph at page 8, line 18 to page 9, line 8:

Particularly preferred examples of compounds of formulas (I) and (Ia) throuhg (Ig) include, without limitation, 2'-phosphophloretin (2'-PP) [CAS name: 1-[2,6-dihydroxy-4-(phosphonooxy)phenyl]-3-(4-hydroxyphenyl)-1-propanone], 3-azido-2'-phosphophloretin (AZPP) [1-[2,6-dihydroxy-4-(phosphonooxy)phenyl]-3-(3-azido-4-hydroxyphenyl)-1-propanone], 4-azido-2'-phosphophloretin [1-[2,6-dihydroxy-4-(phosphonooxy)phenyl]-3-(4-azidophenyl)-1-propanone], 2'-thiophosphophloretin [1-[2,6-dihydroxy-4-(phosphonothio)phenyl]-3-(4-hydroxyphenyl)-1-propanone], 2'-aminophosphophloretin (NHPP) [1-[2,6-dihydroxy-4-(phosphonoimino)phenyl]-3-(4-hydroxyphenyl)-1-propanone], and the pharmaceutically acceptable salts thereof, especially the potassium salts.

Amendment to paragraph at page 9, line 9 to page 12, line 21:

Illustrative preferred examples of ethane-based compounds of formulas (I) and (Ia) through (Ig) (i.e., those compounds where —Z—R<sup>1</sup>— is a 2-carbon chain) include, without limitation,

- 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)ethane,
- 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)ethane,
- 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)ethane,
- 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)ethane,
- 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)ethane,
- 1-(2-phosphonothio-5-dihydroxyphenyl)-2-(3-hydroxyphenyl)ethane

1-(2-phosphonothio-5-hydroxyphenyl)-2-(3-hydroxyphenyl)ethane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)ethane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)ethane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)ethane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)ethane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)ethane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)ethane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)ethane 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonothio-5-dihydroxyphenyl)-2-(4-hydroxyphenyl)ethane 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)ethane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane,

1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane,  $1\hbox{-}(2\hbox{-phosphonooxy-4,}6\hbox{-dihydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1\hbox{-hydroxyethane,}$  $1\hbox{-}(2\hbox{-phosphonoimino-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1\hbox{-hydroxyethane,}$ 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxyethane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane,  $1\hbox{-}(2\hbox{-phosphonoimino-5-hydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-}dihydroxyethane,$ 1-(2-phosphonothio-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane,

1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxyethane,  $1\hbox{-}(2\hbox{-phosphonooxy-}4\hbox{-hydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxyethane,}$ 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane,  $1\hbox{-}(2\hbox{-phosphonooxy-5-hydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-}dihydroxyethane,$ 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane,  $\frac{1\text{-}(2\text{-}phosphonothio\text{-}5\text{-}dihydroxyphenyl})\text{-}2\text{-}(4\text{-}hydroxyphenyl})\text{-}1\text{,}1\text{-}dihydroxyethane}$ 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane,  $1\hbox{-}(2\hbox{-phosphonooxy-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxyethane,}$ 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxyethane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)ethan-1-one,

1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)ethan-1-one,  $1\hbox{-}(2\hbox{-phosphonothio-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{ethan-1-one,}$ alkylated analogs (alkyl groups on the alkylenyl connector or on the two phenyl groups), or amino analogs (hydroxy groups replaced by amino groups), and the like, and the pharmaceutically acceptable salts thereof.

Amendment to paragraph at page 13, line 24 to page 20, line 14:

Illustrative preferred examples of propane-based compounds of formulas (I) and (Ia) through (Ig) include, without limitation,

- 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)propane,
- 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)propane,
- 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)propane,
- 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)propane,
- 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)propane,
- 1-(2-phosphonothio-5-dihydroxyphenyl)-2-(3-hydroxyphenyl)propane
- 1-(2-phosphonothio-5-hydroxyphenyl)-2-(3-hydroxyphenyl)propane,

1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)propane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)propane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)propane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)propane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)propane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)propane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)propane 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonothio-5-dihydroxyphenyl)-2-(4-hydroxyphenyl)propane 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)propane, . 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)propane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane,

1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane,  $1\hbox{-}(2\hbox{-phosphonooxy-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1\hbox{-hydroxypropane,}$  $1\hbox{-}(2\hbox{-phosphonoimino-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1\hbox{-hydroxypropane,}$ 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane,  $1\hbox{-}(2\hbox{-phosphonooxy-4,}6\hbox{-dihydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1\hbox{-hydroxypropane},$ 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxypropane,  $1\hbox{-}(2\hbox{-phosphonothio-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1\hbox{-hydroxypropane,}$  $1\hbox{-}(2\hbox{-phosphonooxy-4-hydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-}dihydroxypropane,$ 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxypropane,  $1\hbox{-}(2\hbox{-phosphonooxy-5-hydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-}dihydroxypropane,$ 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxypropane,  $1\hbox{-}(2\hbox{-phosphonothio-}5\hbox{-hydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxypropane,}$ 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxypropane,

1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-5-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane,  $1\hbox{-}(2\hbox{-phosphonooxy-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxypropane,}$ 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one,

1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonothio-4-hydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonothio-5-dihydroxyphenyl)-3-(3-hydroxyphenyl)propane 1-(2-phosphonothio-5-hydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)propane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonothio-4-dihydroxyphenyl)-3-(4-hydroxyphenyl)propane

1-(2-phosphonothio-4-hydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonothio-5-dihydroxyphenyl)-3-(4-hydroxyphenyl)propane 1-(2-phosphonothio-5-hydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)propane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-4-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane 1-(2-phosphonothio-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane,

1-(2-phosphonoimino-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxypropane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane,  $1\hbox{-}(2\hbox{-phosphonoimino-}5\hbox{-hydroxyphenyl})\hbox{-}3\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxypropane},$ 1-(2-phosphonothio-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-4-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane 1-(2-phosphonothio-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane,  $\textcolor{red}{1 - (2 - phosphonothio - 5 - dihydroxyphenyl) - 3 - (4 - hydroxyphenyl) - 1, 1 - dihydroxypropane}$ 1-(2-phosphonothio-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane,

1-(2-phosphonooxy-6-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane,  $1\hbox{-}(2\hbox{-phosphonothio-}6\hbox{-hydroxyphenyl})\hbox{-}3\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-}dihydroxypropane,$ 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxypropane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-4-hydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one,  $\textcolor{red}{1-(2-phosphonothio-4-dihydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one}$ 1-(2-phosphonothio-4-hydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one,

1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one,
1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one,
1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)propan-1-one,
alkylated analogs (alkyl groups on the alkylenyl connector or on the two phenyl groups),
or amino analogs (hydroxy groups replaced by amino groups), and the like, and the
pharmaceutically acceptable salts thereof.

Amendment to paragraph at page 20, line 15 to page 30, line 8:

Illustrative preferred examples of butane-based compounds of formulas (I) and (Ia) through (Ig) include, without limitation,

- 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- $\textcolor{red}{\textbf{1-(2-phosphonothio-5-dihydroxyphenyl)-2-(3-hydroxyphenyl)} butane}$
- 1-(2-phosphonothio-5-hydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)butane,
- 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)butane,
- 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)butane,
- 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)butane,
- 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)butane,

1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)butane,  $\textcolor{red}{1\text{--}(2\text{-phosphonothio-5--dihydroxyphenyl})-2\text{--}(4\text{-hydroxyphenyl})} but ane$ 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)butane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)butane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane,  $1\hbox{-}(2\hbox{-phosphonothio-5-hydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1\hbox{-hydroxybutane},$ 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane,

1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane,  $1\hbox{-}(2\hbox{-phosphonooxy-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1\hbox{-hydroxybutane},$ 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonothio-}4\hbox{-hydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane,}$ 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonothio-5-hydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane,}$ 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonooxy-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane,}$  $1\hbox{-}(2\hbox{-phosphonoimino-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane,}$ 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonooxy-4-hydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-}dihydroxybutane,$ 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-5-dihydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane,

1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonooxy-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane,}$  $1\hbox{-}(2\hbox{-phosphonoimino-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-}dihydroxybutane,$  $1\hbox{-}(2\hbox{-phosphonothio-4,6-dihydroxyphenyl})\hbox{-}2\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1\hbox{,}1\hbox{-}dihydroxybutane,$ 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-4-hydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4-hydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-4-dihydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one 1-(2-phosphonothio-4-hydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one,

1-(2-phosphonothio-4,6-dihydroxyphenyl)-2-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonothio-4-hydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonothio-5-dihydroxyphenyl)-3-(3-hydroxyphenyl)butane 1-(2-phosphonothio-5-hydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)butane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonothio-4-dihydroxyphenyl)-3-(4-hydroxyphenyl)butane 1-(2-phosphonothio-4-hydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(4-hydroxyphenyl)butane,  $\textcolor{red}{\textbf{1-(2-phosphonothio-5-dihydroxyphenyl)-3-(4-hydroxyphenyl)} butane$ 1-(2-phosphonothio-5-hydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)butane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)butane,

1-(2-phosphonooxy-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane 1-(2-phosphonothio-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane,  $1\hbox{-}(2\hbox{-phosphonothio-}6\hbox{-hydroxyphenyl})\hbox{-}3\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1\hbox{-hydroxybutane},$ 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-4-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane,

1-(2-phosphonooxy-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-5-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonooxy-}6\hbox{-hydroxyphenyl})\hbox{-}3\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane,}$ 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonoimino-4,6-dihydroxyphenyl})\hbox{-}3\hbox{-}(3\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-}dihydroxybutane,$ 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-4-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane 1-(2-phosphonothio-4-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-5-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane 1-(2-phosphonothio-5-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonooxy-}6\hbox{-hydroxyphenyl})\hbox{-}3\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane,}$ 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonothio-}6\hbox{-hydroxyphenyl})\hbox{-}3\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane},$ 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonothio-4,6-dihydroxyphenyl})\hbox{-}3\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane,}$ 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-4-hydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one,

1-(2-phosphonothio-5-hydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4-hydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-4-dihydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one 1-(2-phosphonothio-4-hydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-3-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4-hydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonoimino-4-hydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonothio-4-hydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonooxy-5-hydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonoimino-5-hydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonothio-5-dihydroxyphenyl)-4-(3-hydroxyphenyl)butane 1-(2-phosphonothio-5-hydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonooxy-6-hydroxyphenyl)-4-(3-hydroxyphenyl)butane,

1-(2-phosphonoimino-6-hydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonothio-6-hydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)butane, 1-(2-phosphonooxy-4-hydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-4-hydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonothio-4-dihydroxyphenyl)-4-(4-hydroxyphenyl)butane 1-(2-phosphonothio-4-hydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-5-hydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-5-hydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonothio-5-dihydroxyphenyl)-4-(4-hydroxyphenyl)butane 1-(2-phosphonothio-5-hydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-6-hydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-6-hydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonothio-6-hydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)butane, 1-(2-phosphonooxy-4-hydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4-hydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-5-hydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-6-hydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-6-hydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane,

1-(2-phosphonooxy-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-4-hydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4-dihydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane 1-(2-phosphonothio-4-hydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-5-hydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-6-hydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-6-hydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)-1-hydroxybutane, 1-(2-phosphonooxy-4-hydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-4-hydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-5-hydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-6-hydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-6-hydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)-1,1-dihydroxybutane,

1-(2-phosphonooxy-4-hydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-4-hydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane,  $\textcolor{red}{1\text{-}(2\text{-phosphonothio-4--}dihydroxyphenyl)-4-(4\text{-hydroxyphenyl})-1,1\text{-}dihydroxybutane}$ 1-(2-phosphonothio-4-hydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-5-hydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-5-hydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane,  $\textcolor{red}{1-(2-phosphonothio-5-dihydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane}$ 1-(2-phosphonothio-5-hydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-6-hydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-6-hydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonothio-6-hydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)-1,1-dihydroxybutane,  $1\hbox{-}(2\hbox{-phosphonothio-4,6-dihydroxyphenyl})\hbox{-}4\hbox{-}(4\hbox{-hydroxyphenyl})\hbox{-}1,1\hbox{-dihydroxybutane,}$ 1-(2-phosphonooxy-4-hydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-4-hydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-5-hydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-5-hydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-5-hydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-6-hydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-6-hydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-6-hydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonothio-4,6-dihydroxyphenyl)-4-(3-hydroxyphenyl)butan-1-one, 1-(2-phosphonooxy-4-hydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one, 1-(2-phosphonoimino-4-hydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one,

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1-(2-phosphonooxy-5-hydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one,
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1-(2-phosphonoimino-6-hydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one,
1-(2-phosphonoimino-6-hydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one,
1-(2-phosphonooxy-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one,
1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one,
1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one,
1-(2-phosphonoimino-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one,
1-(2-phosphonothio-4,6-dihydroxyphenyl)-4-(4-hydroxyphenyl)butan-1-one,
1-(2-phosphonothio-4,6-dihydroxyphenyl)-4-(4-hydroxyp